

November 8, 2010



Water Docket
Environmental Protection Agency
Mailcode: 28221T
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

RE: Docket ID No. EPA-R03-OW-2010-0736
Comments on Draft Chesapeake Bay TMDL for Nutrients and Sediment

To Whom It May Concern:

Merck lauds Virginia Department of Environmental Quality's efforts of working closely with the citizens and organizations of the Commonwealth of Virginia in coming up with a fair and equitable waste load allocation for total nitrogen and total phosphorous. Total Suspended Solid (TSS), although considered to have met EPA's allocation, ironically has become an issue for Virginia.

A summary report of the Sediment Processes in Chesapeake Bay and Water Shed (Water-Resources Investigation Report 03-4123 by USGS - <http://www.mgs.md.gov/coastal/pub/wrir03-4123.pdf>) indicates that 1 to 3% of the sediment in the bay is organic in nature. The amount and quality of sediment (size and composition) present in the bay is a result of the geologic, oceanic and atmospheric events as well as the man made changes (deforestation and farming).

The organic content of total suspended solids (TSS) in municipal and industrial wastewater treatment plants that rely on biodegradation of wastes is high. And within such dischargers, the organic content of the TSS in the industrial dischargers that treat waste that has comparatively higher concentration of organic and complex biological material (wood, food, veterinary and microbiological), is considerably higher. Studies carried out on the composition of the TSS from the discharge of treated wastewater from such industries is greater than 80% of organic (based on total volatile suspended solids assay - TVSS) and the TSS contains a large fraction of fine particles much smaller than the typical wastewater treatment plant bacteria, making it very difficult to remove by conventional means of settling and/or filtration.

DEQ is carefully reviewing the historical data for TSS from various sources and will be providing a fair and equitable allocation based on the nature and source of the treated wastewater from point sources; Merck supports DEQ's efforts.

Sincerely,

Abhay C. Kurpekar, for

John McCloskey
Environmental Manager
Merck Sharp & Dohme Corp.